

Work Order ID 66236

Page 1

February 8, 2011 8:43:37 AM

Item ID: D3535-23

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 2/08/11 Start Qty: 12.00



Cust Item ID:

Required Date: 2/22/11 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan: CYDate: 11/02/08

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3535	Rev B

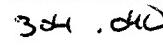
100



FLOW WATER JET

Waterjet

FLOW CNC Waterjet



Memo

I-Cut as per Dwg D3535 Dwg Rev: 8 Prog Rev: 8 2-
Deburr if necessaryB11-2-15

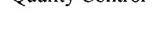
110



QC2- Inspect parts off machine FAI/FAIB

QC

Quality Control



Memo

0.00

B11-2-15

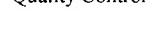
120



QC8- Inspect parts - second check

QC

Quality Control



Memo

0.00

S 11/02/16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 66236

February 8, 2011 8:43:37 AM



Page 2

Item ID: D3535-23

Accept



Setup Start



Revision ID:

Item Name: Wearshoe

Stop



Start Date: 2/08/11 Start Qty: 12.00



Cust Item ID:

Required Date: 2/22/11 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130

Operation
Description

NC BRAKE

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Brake NC

Memo

0.00

13

Brake NC

1-Form on Brake as per Dwg D3535 using Jigs DT8261 and DT8326
2-Form joggle as per Dwg D3535 using Jig DT8158
3-Identify as D3535-23

Sp 1160116

140



QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

Memo

0.00

(13)

150



Grey Sandtex(Ref:4.3.5.6) per OSI005 4.3

0.00

Powdercoat

Powder Coating

Memo

0.00

START TIME: 1:05 OVEN TEMPERATURE:
FINISH TIME: 1:35

13 BL 11-2-23.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 66236

February 8, 2011 8:43:37 AM



Page 3

Item ID: D3535-23

Revision ID:

Item Name: Wearshoe

Start Date: 2/08/11 Start Qty: 12.00

Accept



Setup

Start



Stop



Required Date: 2/22/11 Req'd Qty: 12.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

160



QC

Quality Control

Operation
Description

QC3- Inspect Part Finish

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

13 of 14 11/02/2011

170



Packaging

Packaging

Identify as per dwg & Stock Location:

FP-21

0.00

13 BR 11-2-23.

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/02/24 HJ
13 HJ 11/02/23MF
11-02-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 1

February 8, 2011 8:43:36 AM

Work Order ID: 66236



Parent Item: D3535-23



Parent Item Name: Wearshoe

Start Date: 2/08/11

Required Date: 2/22/11

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 07-02-15 JLM
IPP Rev:B As per Rev B 07-08-31 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S20GA 		Purchased	No			100	sf	149.5538	1.3615	17.19789		 1311-2-15	

304/316 .040 Sheet

Location	Loc Qty	Loc Code
MAT	149.5538	
115953	21.6	
116437	52.7538	
116623	75.2	116623

(13)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	66234
Description: Wearshoe	Part Number:	D3535-23
Inspection Dwg: D3535 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.885	+/-0.010	1.888	*		V (B02)	
2.000	+/-0.010	2.000	*		V 1	
4.750	+/-0.010	4.750	*		T (B01)	
9.500	+/-0.010	9.560	X		T	
14.250	+/-0.010	14.250	X		T	
17.750	+/-0.010	17.750	X		T	
23.140	+/-0.010	23.140	X		T	
28.530	+/-0.010	28.530	X		T	
33.920	+/-0.010	33.920	X		T	
39.310	+/-0.010	39.310	X		T	
44.700	+/-0.010	44.700	X		T	
48.200	+/-0.010	48.200	X		T	
52.850	+/-0.010	52.850	X		T	
Ø0.188	+0.005/-0.001	.190	*		V	
48.00	+/-0.030	48.00	Y		T	
39.00	+/-0.030	39.00	X		T	
32.00	+/-0.030	32.00	X		T	
24.00	+/-0.030	24.00	X		T	
16.00	+/-0.030	16.00	X		T	
8.00	+/-0.030	8.00	X		T	
6.00	+/-0.030	6.00	X		T	
0.300	+/-0.010	.300	X		V	
0.300	+/-0.010	.303	X		V	
0.038	+/-0.010	.038	*		V	

Measured by:	RS
Date:	11-2-15

Audited by:	SD
Date:	11/02/16

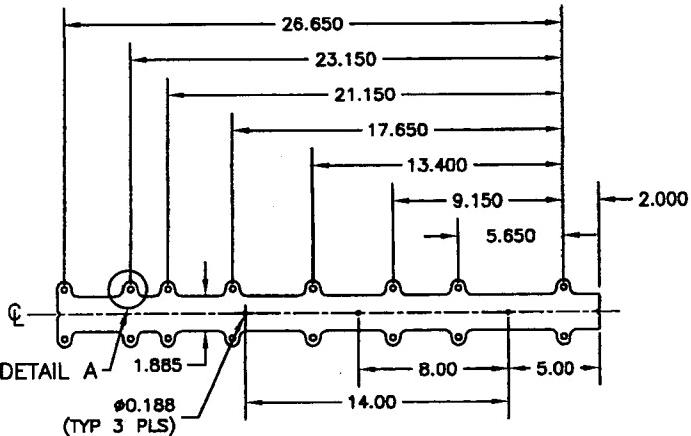
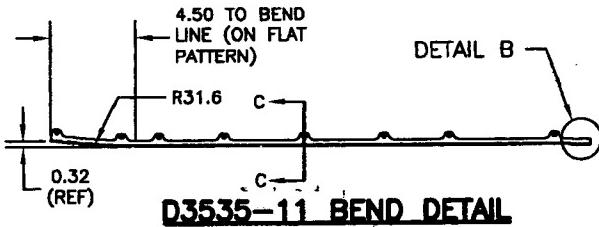
Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.11.23	New Issue	KJ/EC/DD	DS

DART

RELEASED

07.04.24

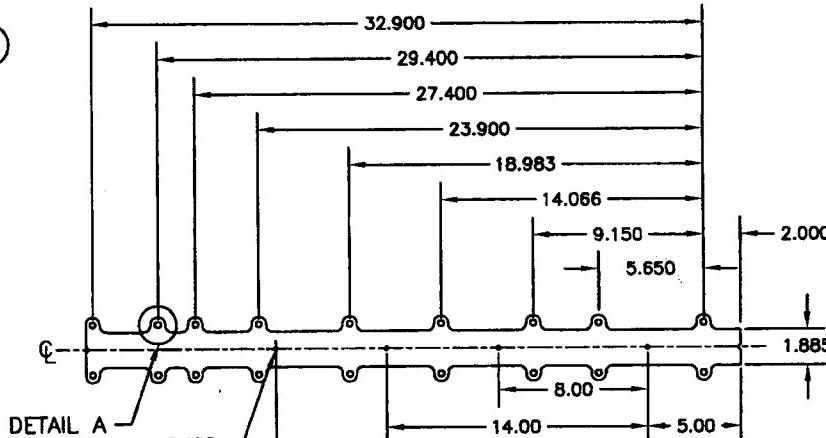
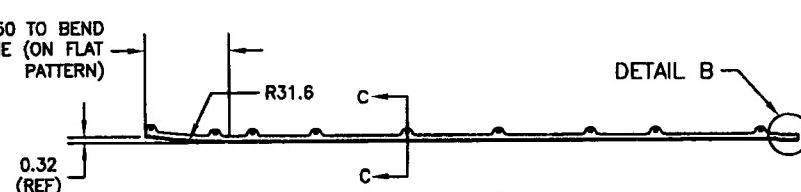
**D3535-11F FLAT PATTERN****D3535-11 BEND DETAIL**

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WITHOUT NOTICE
WORK ORDER
NO. 46236
46236
46236

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524.
20 GAUGE (0.038 THICK)
(REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER
QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT $\frac{C}{2}$
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT
PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION

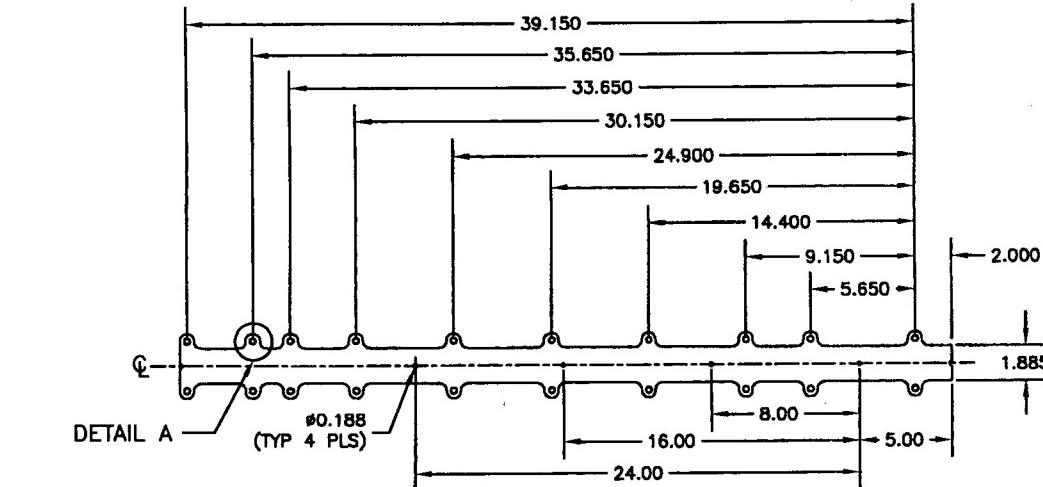
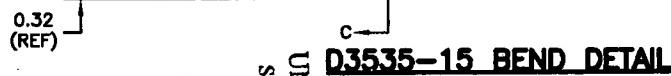
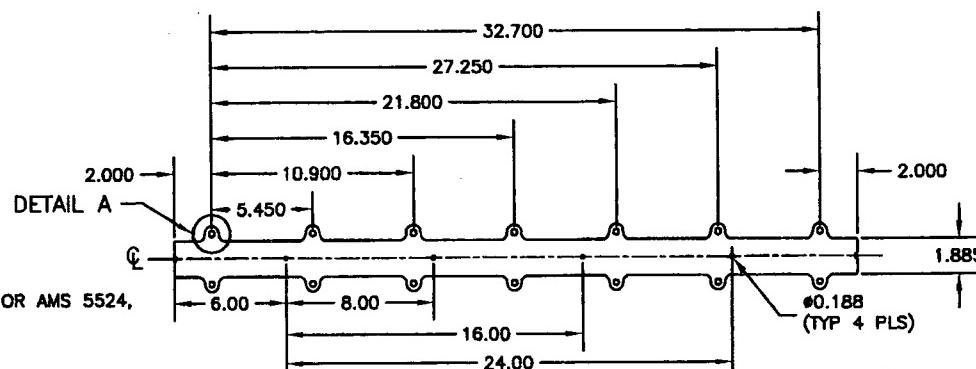
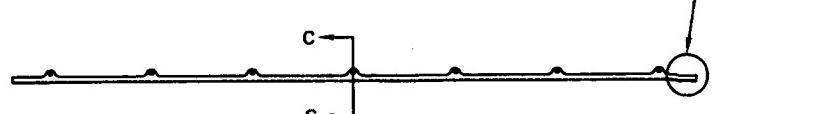
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Copyright © 2006 by DART AEROSPACE USA, INC.**D3535-13F FLAT PATTERN****D3535-13 BEND DETAIL**

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
C8	RH	PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO.
		D3535
DATE		TITLE
07.04.17		WEARSHOE
A	06.10.25	NEW ISSUE
B	07.04.17	MOVE TAB OUTBOARD, ADD AMS SPEC
		SCALE
		1:10
		REV. B
		SHEET 1 OF 7

DARTRELEASED
07.04.17

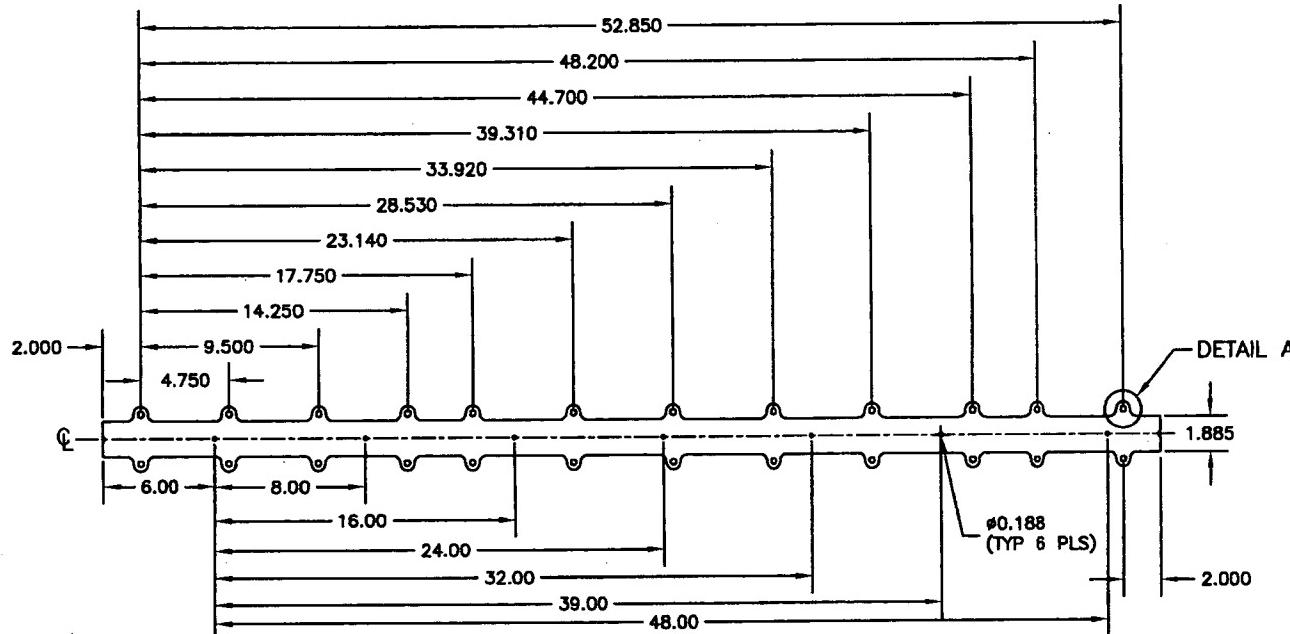
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CHECKED MH	APPROVED MH	DRAWING NO. D3535
DATE 07.04.17	TITLE WEARSHOE	REV. B SHEET 2 OF 7 SCALE 1:10

**D3535-15F FLAT PATTERN****D3535-15 BEND DETAIL****D3535-21F FLAT PATTERN****D3535-21 BEND DETAIL**

- NOTES**
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
 - 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER QSI 005 4.3
 - 3) PART IS SYMMETRICAL ABOUT $\frac{C}{2}$
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES
 - 6) BREAK ALL SHARP EDGES TO 0.010 MAX
 - 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
 - 8) SEE PAGE 7 FOR DETAILS AND SECTION

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D3535-23F FLAT PATTERN

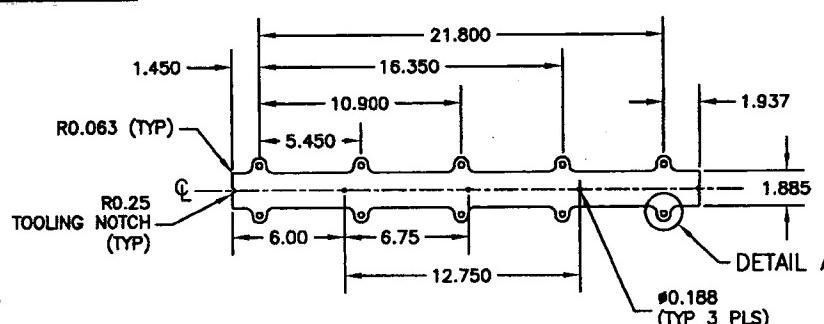


D3535-23 BEND DETAILS

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WORK ORDER
NO. 662-36

NOTE

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524.
20 GAUGE (0.038 THICK)
(REF DART SPEC M304S20GA)
 - 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER
QSI 005 4.3
 - 3) PART IS SYMMETRICAL ABOUT Q.
 - 4) TOLERANCES ARE PER DART QSI 01B UNLESS
OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES
 - 6) BREAK ALL SHARP EDGES TO 0.010 MAX
 - 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT
PAINT MARKER
 - 8) SEE PAGE 7 FOR DETAILS AND SECTION



D3535-25F FLAT PATTERN

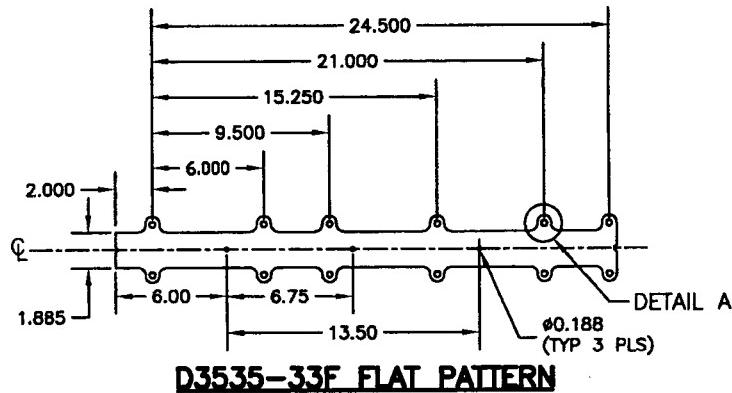
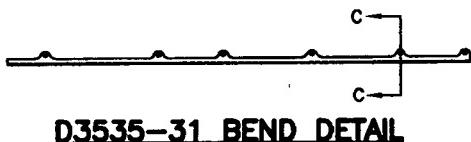
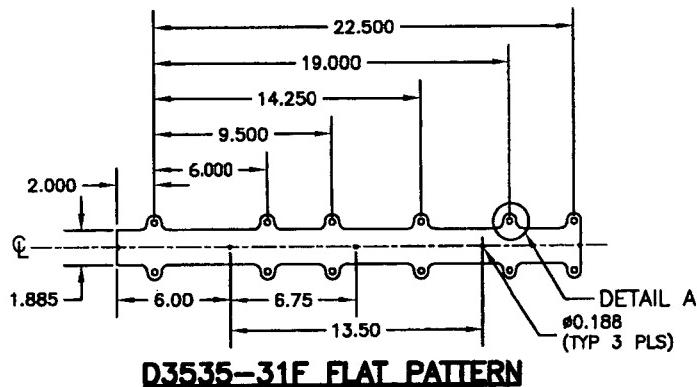


D.35.35-25 REND DETAIL

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DATE 07.04.17	TITLE WEARSHOE	SHEET 3 OF 7	SCALE 1:10

DART

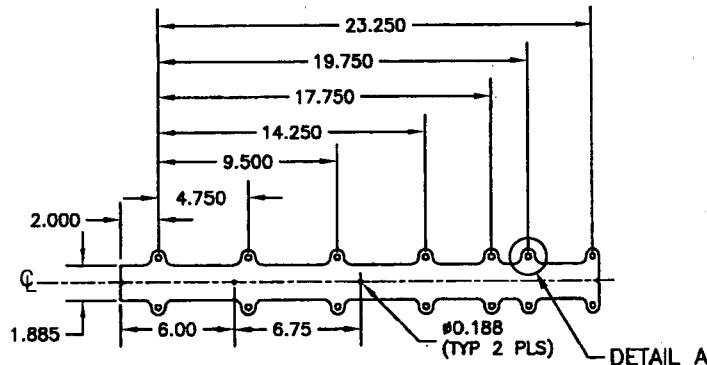
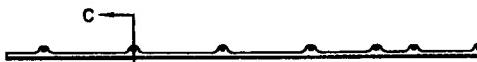
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07.04.24



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<i>[initials]</i>	<i>[initials]</i>	D3535
DATE		TITLE
07.04.17		WEARSHOE
		SHEET 4 OF 7
		SCALE
		1:10

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524.
20 GAUGE (0.038 THICK)
(REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANTEX (4.3.5.6) PER
QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT $\frac{Q}{2}$
- 4) SUBJECT TO AMENDMENT
WITHOUT NOTICE
- 5) WORK ORDER
NO. 64236
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES TO 0.010 MAX
- 8) IDENTIFY WITH DART P/N USING WHITE FINE POINT
PAINT MARKER
- 9) SEE PAGE 7 FOR DETAILS AND SECTION

DARTRELEASED
07.04.17**D3535-35F FLAT PATTERN****D3535-35 BEND DETAIL**

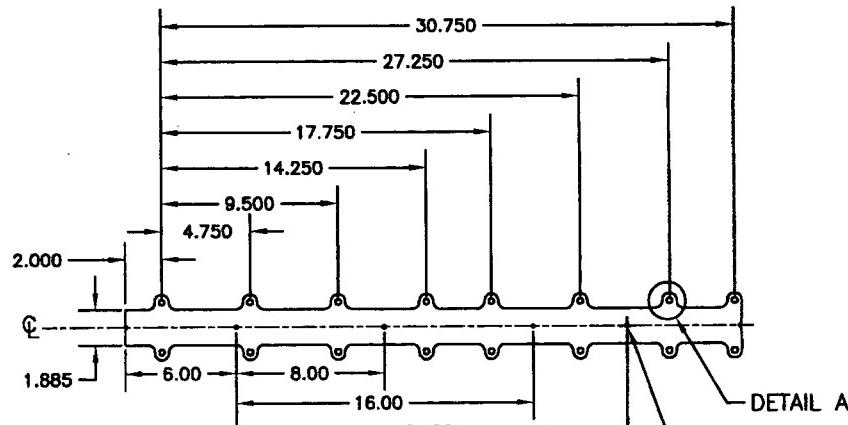
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WORK ORDER
NO. 66236

NOTES

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QSI 005 4.3
- 3) PART IS SYMMETRICAL ABOUT C
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED
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**D3535-37F FLAT PATTERN****D3535-37 BEND DETAIL**

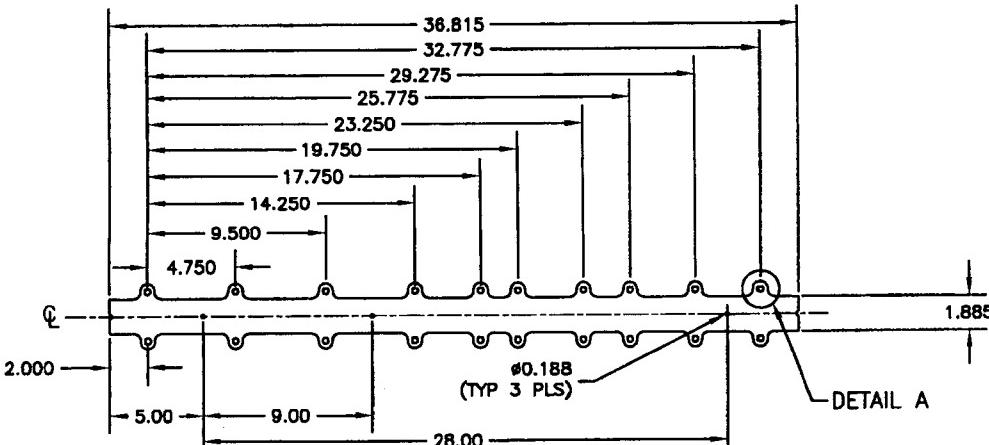
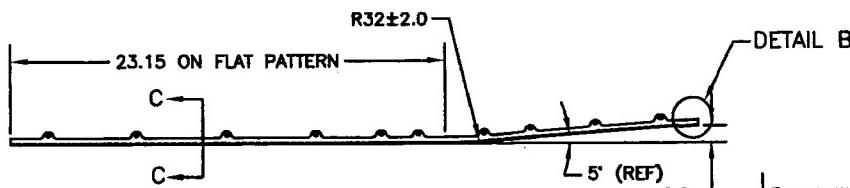
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C.B	RH	DRAWING NO. D3535
CHECKED	APPROVED	DATE 07.04.17
		TITLE WEARSHOE
		SCALE 1:10
		REV. B SHEET 5 OF 7

DART

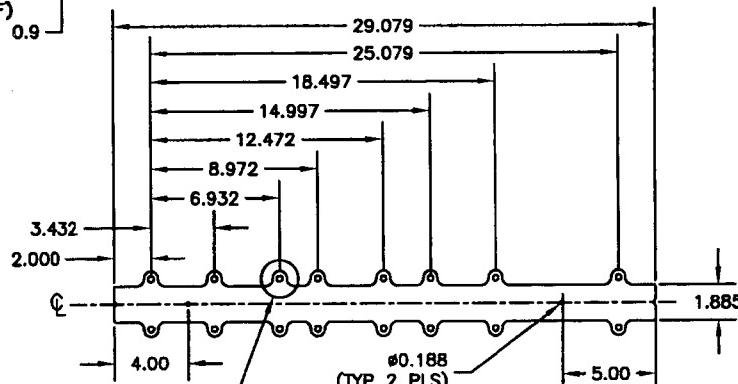
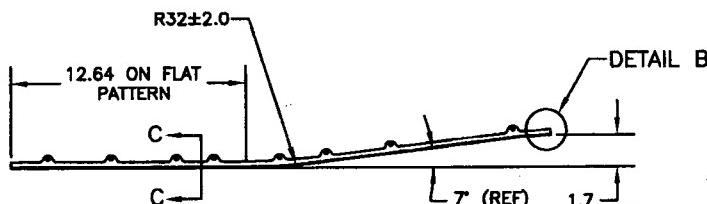
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CHECKED /	APPROVED /	DRAWING NO. D3535
DATE 07.04.17	DATE 07.04.17	TITLE WEARSHOE

REV. B
SHEET 6 OF 7
SCALE
1:10

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07.04.24

**D3535-39F FLAT PATTERN****D3535-39 BEND DETAIL**

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NO. 66236

**D3535-41F FLAT PATTERN****D3535-41 BEND DETAIL**

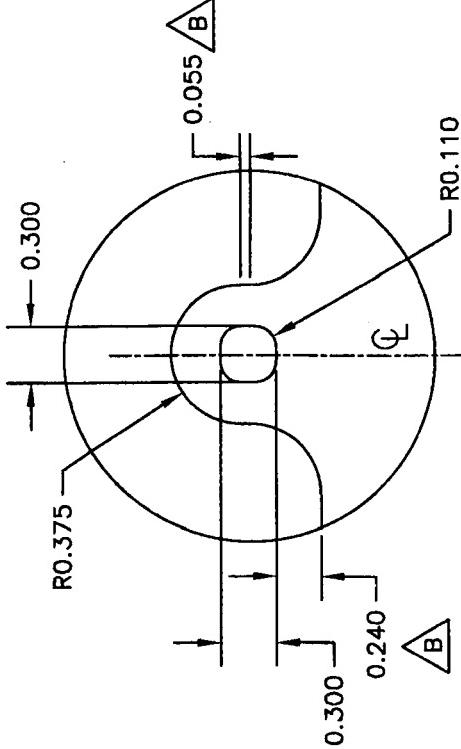
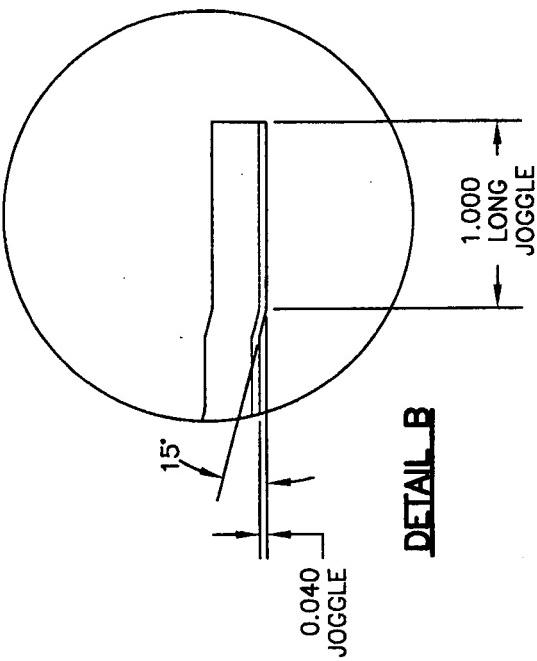
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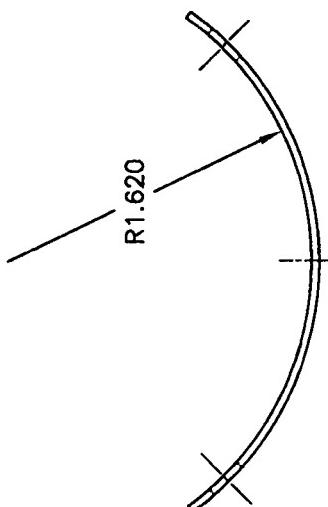
DART

DESIGN <i>CB</i>	DRAWN BY <i>PH</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED <i>[initials]</i>	APPROVED <i>[initials]</i>	DRAWING NO. D3535
DATE 07.04.17	TITLE	SCALE 1:1

RELEASED

07.04.24 *[initials]***DETAIL A****DETAIL B**

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**SECTION C-C**

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